

Attorney Docket No.: 94-36-3-US-D1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Werenicz et al.

Art Unit: 1733

Serial No.:

09/057,406

Examiner: Aftergut

Filed:

April 8, 1998

Title:

METHOD FOR PRODUCING A CONTINUOUS THERMOPLASTIC

COATING

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 MAIL STOP RCE

DECLARATION OF SHARF U. AHMED

- I, Sharf U. Ahmed, state and declare as follows.
- 1. I have a Ph.D. in Organic Polymer Chemistry from Auburn University and a Bachelor of Science degree in Chemistry from Dhaka University.
- 2. Since 1991 I have been employed by H.B. Fuller Company as a Senior Chemist/Research Chemist specializing in formulating adhesives and coatings for the pulp, paper, packaging and nonwoven industries.
- Our Analytical laboratory measured the complex viscosity of various polymers at 1 radian per second at 160°C and 1000 radians per second at 160°C. The polymers included EPOLENE C17 polyethylene, VESTOPLAST 792 amorphous polyalpha-olefin (APAO), and VESTOPLAST 708 amorphous poly-alpha-olefin (APAO). The results are set forth in Table 1 below.

Polymer	Complex Viscosity at 1	Complex Viscosity at 1000
	radian/second and 160°C	radian/second and 160°C
	(Poise)	(Poise)
EPOLENE C17	13,100	Approximately 770
polyethylene		
VESTOPLAST 792 APAO	2,690	Approximately 360
VESTOPLAST 708 APAO	186	Approximately 74

4. I measured the viscosity of EVA 28-800 ethylene vinyl acetate at 325°F (162.8°C) in a Brookfield thermocell viscometer using a number 27 spindle, set to a speed of 10 rotations per minute, which is similar to 1 radian per second. The viscosity of EVA 28-800 was 169 poise. The viscosity of EVA 28-05 could not be measured in the Brookfield thermocell viscometer because the sample was so viscous at 325°F that the spindle could not move.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under section 1001 Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent on which this statement is directed.

Further I declare not.

Date:		
	•	Sharf U. Ahmed
		H.B. Fuller Company



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DECLARATION OF GEORGE BROWN

- I, George Brown, declare as follows.
- 1. I hold a Masters Degree in Chemical Engineering from MIT and a Bachelors Degree in Chemical Engineering from Oregon State University. I am a registered Professional Engineer.
 - 2. I have been an employee of the H.B. Fuller Company since 1994.
- 3. I started working with the noncontact coating method described in the above-referenced application in 2001. This work has included setting up, modifying and trouble shooting the coating process and apparatus described in the above-referenced application at various facilities.
- 4. I have read and am familiar with the information disclosed in EP 315013. I conducted an experiment in which a coating apparatus was set up in a manner similar to that depicted in Figure 2 of EP 315013 with the exception that the slot nozzle was positioned away from the moving web (i.e., the slot nozzle was not in contact with the moving web), and the web moved in a direction from bottom to top. Ethylene-vinyl acetate (EVA) was supplied to the slot nozzle. During operation, when the EVA arrived at the nozzle it accumulated at the nozzle opening in a glob and then dripped in a downward direction. The EVA did not contact the moving web, did not adhere to the moving web, and did not form a continuous film. I then attempted to force the EVA to contact the web. The EVA immediately came off the web, i.e., it would not stick to the web.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under section 1001 Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent on which this statement is directed.

Further I declare not.

Date: 6/17/04

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